#### **Earth Science**

# QuakeSim: Multi-Source Synergistic Data Intensive Computing for Earth Science



Completed Technology Project (2012 - 2015)

#### **Project Introduction**

Update QuakeSim services to integrate and rapidly fuse data from multiple sources to support comprehensive efforts in data mining, analysis, simulation, and forecasting.

Extend QuakeSim infrastructure to include tiered publishing mechanisms and data provenance, trust, and history tracking.

Develop and deploy a Cloud Computing architecture to access and analyze large and heterogeneous data products and integrate them with earthquake models and simulations.

#### **Anticipated Benefits**

ICESAT-II

#### **Primary U.S. Work Locations and Key Partners**



Organizations Performing Work	Role	Туре	Location
★NASA	Lead	NASA	Washington,
Headquarters(HQ)	Organization	Center	District of Columbia
Jet Propulsion Laboratory(JPL)	Supporting	NASA	Pasadena,
	Organization	Center	California



Project Image QuakeSim: Multi-Source Synergistic Data Intensive Computing for Earth Science

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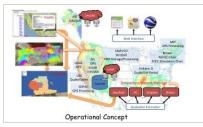


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#### **Primary U.S. Work Locations**

California

#### **Images**



#### 10958-1360167325413.jpg

Project Image QuakeSim: Multi-Source Synergistic Data Intensive Computing for Earth Science (https://techport.nasa.gov/image/1600)

### Organizational Responsibility

### Responsible Mission Directorate:

Science Mission Directorate (SMD)

#### Lead Center / Facility:

NASA Headquarters (HQ)

#### **Responsible Program:**

Earth Science

### **Project Management**

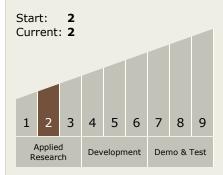
#### **Program Director:**

George J Komar

#### **Principal Investigator:**

Andrea Donnellan

# Technology Maturity (TRL)



### **Technology Areas**

#### **Primary:**

Continued on following page.



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# Technology Areas (cont.)

- TX11 Software, Modeling, Simulation, and Information Processing
  - ☐ TX11.4 Information Processing
    - ☐ TX11.4.4 Collaborative Science and Engineering

### Target Destination Earth

